

What Is Claimed Is:

1. An information delivery system including a plurality of information terminal devices and a server apparatus connected to respective ones of said information terminal devices for providing information as required from each information terminal device, characterized in that each of said plurality of information terminal devices comprises:

position detection means for detecting a position of itself,

terminal side communication means for transmitting information indicative of said position thus detected toward said server apparatus while receiving information as sent from said server apparatus;

operation instruction receipt means for receiving and accepting from a user an operation instruction for instruction of the content of a service required and for permitting transmission of the operation instruction toward said server apparatus through said terminal side communication means; and

output means for outputting the information as sent from said server apparatus in a way corresponding to said service required, and that

said server apparatus comprises:

server side communication means for receiving information indicative of a position being sent from said

09879164.051301

each information terminal device and for transferring information as generated by utilization of the position information toward more than one information terminal device; and

5 processor means for generating information to be sent to said information terminal device by utilizing the position information as sent from said information terminal device, wherein

10 said information terminal device is operable to detect the position of said information terminal device at a predefined timing for transmission of information indicative of the detected position toward said server apparatus, and

15 said server apparatus further comprises position information storage means for storing therein position information as sent from said plurality of information terminal devices in units of users of the information terminal devices.

20 2. The information delivery system as recited in claim 1, characterized in that

25 said information terminal device sends forth the information as to the position of said information terminal device toward said server apparatus when corresponding to at least one of a case where a specified length of time has elapsed since its previous position information transmission event and a case where the position has

09879154-061301
FOI90-49762860

changed by a degree greater than a predefined threshold value.

3. The information delivery system as recited in claim 1, characterized in that

said server apparatus further comprises group information storage means for storing therein information used to specify a group to which said user belongs on a per-user basis, and that

the processor means of said server apparatus comprises position service means for generating, when the operation instruction being sent from said information terminal device requires a group display service, image information adapted to be used for displaying on the same land map image screen a combination of a user position as indicated by the position information from said information terminal device and a position as sent from the information terminal device of another user who belongs to the same group as said user and for permitting the image information thus generated to be transmitted from said server side communication means to said information terminal device.

4. The information delivery system as recited in claim 3, characterized in that in said server apparatus of said information delivery system,

said group information storage means is for storing, in addition to the information for specifying a group to

09879154-061301

which said each user belongs, group display flag
information indicative of allowability of visual
displaying of its own position when generating said
processor means image information for displaying on the
5 same land map image screen the position of a user belonging
to the same group, and that

said position service means generates image
information for displaying on the same land map image
screen only the user's position that said group information
10 storage means indicates the allowance of display thereof.

5. The information delivery system as recited in claim
1, characterized in that

said server apparatus further comprises personal
15 information storage means for storing therein information
as to each user with respect to predefined classification
items,

the position information storage means of said server
apparatus stores a history of position in units of
20 respective users, and

the processor means of said server apparatus comprises
distribution service means for extracting a user as
classified based on one of said classification items when
an operation instruction as sent from said information
25 terminal device calls for a distribution service, for using
the history of the position of such extracted user to
generate information indicative of a distribution of user

09879164-061301
FOIb9049164860

positions classified, and for permitting the generated information to be sent from said server side communication means toward said information terminal device.

5 6. The information delivery system as recited in claim 5, characterized in that

 said classification items include at least one of a participative event, land area, age, male/female identification, time zone, date, and month.

10

 7. The information delivery system as recited in claim 5, characterized in that

 the distribution service means of the processor means of said server apparatus generates, when the operation instruction being sent from said information terminal device requests a congestion degree display service, information indicative of a degree of per-facility congestion from a presently verified number of users in units of a plurality of location-preregistered facilities, said users being in the same land area as the facility position or alternatively being positioned in a region within a range of a predetermined distance, and for transmitting information indicating the degree of congestion thus calculated with respect to each of said plurality of facilities toward said information terminal device.

15

20

25

09879164-061301

8. The information delivery system as recited in claim 5, characterized in that

the position information storage means of said server apparatus stores a history of positions of said plurality of users, and

the distribution service means of the processor means of said server apparatus is operable, when the operation instruction being sent from said information terminal device requests a popularity degree display service, to calculate from the history of the positions of said plurality of users information indicative of a degree of popularity in units of multiple location-preregistered facilities and then send to said information terminal device the information indicating the degree of popularity thus calculated with respect to each of said plurality of facilities.

9. The information delivery system as recited in claim 1, characterized in that

the position information storage means of said server apparatus stores a history of the position of each user, and that

the processor means of said server apparatus comprises history service means for generating, when the operation instruction being sent from said information terminal device requires a history service, information indicative of a history of position of the user of the information

09879164-061301

terminal device which has sent the operation instruction thereto and for permitting transmission of the generated information from said server side communication means to said information terminal device.

5

10. The information delivery system as recited in claim 1, characterized in that

10 said information terminal device further comprises image upload means for sending image information to said server apparatus through said terminal side communication means, and image download means for receiving image information from said server apparatus via said terminal side communication means,

15 said server apparatus further comprises image storage means for storing therein more than one image as sent from said information terminal device on a per-user basis, and

the processor means of said server apparatus comprises:

20 image service means for storing, when the operation instruction being sent from said information terminal device requests an image upload service, more than one image being sent from the information terminal device which has sent the operation instruction in said image storage means on a per-user basis, and

25 for permitting, when said operation instruction requests an image download service, transmission of image information being presently stored in said image storage

09879164-061301

means from said server side communication means to said information terminal device in a way corresponding to the user of the information terminal device which has sent the operation instruction.

5

11. The information delivery system as recited in claim 5, characterized in that

the processor means of said server apparatus further comprises route search service means for searching, when the operation instruction being sent from said information terminal device requests a route search service, a recommended route leading to a given destination location, for generating image information for letting the recommended route be displayed on a land map, and for permitting transmission of the generated image information from said server side communication means to said information terminal device,

said distribution service means calculates an index number indicative of a degree of at least one of congestion and popularity with respect to each of a plurality of preregistered facilities, and

said route search service means searches for more than one recommended route while letting the index number thus calculated by said distribution service means be included as one of search conditions.

12. An information terminal device for receipt of

09879164-061301

provision of more than one information service while being connected to a server apparatus operatively associated therewith, characterized by comprising:

5 position detection means for detecting a position of itself;

terminal side communication means for sending information indicative of said position thus detected toward said server apparatus and for receiving information as sent from said server apparatus; and

10 said position detection means being operable to detect a position once at a time whenever a specified time has elapsed from its previous position information transmission event and then send forth information concerning such newly detected position toward said server
15 apparatus through said terminal side communication means.

13. An information terminal device for receipt of provision of more than one information service while being connected to a server apparatus operatively associated
20 therewith, characterized by comprising:

position detection means for detecting a position of itself;

terminal side communication means for sending information indicative of said position thus detected
25 toward said server apparatus and for receiving information as sent from said server apparatus; and

said position detection means transmitting, when the

09879164-061301

newly detected position changes to be greater than a predefined threshold value, information concerning the newly detected position toward said server apparatus via said terminal side communication means.

5

14. A server apparatus connected to a plurality of information terminal devices for providing information as required from each information terminal device, characterized by comprising:

10 server side communication means for receiving information indicative of a position as sent from said each information terminal device and for sending information generated by utilizing the position information toward more than one information terminal device;

15 processor means for utilizing the position information as sent from said information terminal device to generate information to be sent to said information terminal device; and

20 position information storage means for storing therein position information as sent from said each information terminal device and a history thereof in units of users of said information terminal devices.

15. An information service providing method for use in
25 an information delivery system comprising a plurality of information terminal devices and a server apparatus connected to each of said plurality of information terminal

09879164-061301
T02190-49167860

devices for providing information as required from each information terminal device, characterized by comprising the steps of:

causing each of said plurality of information terminal devices to send toward said server apparatus both information indicative of its own position and information for specifying a group to which users of the information terminal devices belong;

permitting said server apparatus to generate from the position information as sent from said plurality of information terminal devices and the information for specifying said group certain image information for synthesis and display of a position of each user belonging to the same group on the same land map and then send forth such generated image information toward a request-issued information terminal device.

16. An information service providing method for use in an information delivery system comprising a plurality of information terminal devices and a server apparatus connected to each of said plurality of information terminal devices for providing information as required from each information terminal device, characterized by comprising the steps of:

causing each of said plurality of information terminal devices to send to said server apparatus both information indicative of its own position and information indicating

09879164-061301

the content of a service required;

permitting said server apparatus to generate
information to be provided in reply to a request from said
each information terminal device and send such generated
5 provision information to a request-issued information
terminal device presenting; and

letting said server apparatus determine an amount of
money charged on a user in accordance with the content of
said sent provision information while storing a history
10 of information indicative of the amount of charged money
thus determined and that of said position information as
sent thereto on a per-user basis.

17. An information service providing method for use in
15 an information delivery system comprising a plurality of
information terminal devices and a server apparatus
connected to each of said plurality of information terminal
devices for providing information as required from each
information terminal device, characterized by comprising
20 the steps of:

letting a user carry said information terminal device
when the user comes into a land area in which a plurality
of enterable facilities are disposed;

causing said each information terminal device to
25 detect its own position and transmit information
indicative of such detected position to said server
apparatus; and

09879154.051301
T06T90"49T62860

permitting said server apparatus to calculate from position information being sent from each of said plurality of information terminal devices an index number indicating either a degree of congestion or a degree of popularity with respect to each of said plurality of facilities and then send information indicating such calculated index number to said information terminal device which has issued a request to do so.

18. An information service providing method for use in an information delivery system comprising a plurality of information terminal devices and a server apparatus connected to each of said plurality of information terminal devices for providing information as required from each information terminal device, characterized by comprising the steps of:

causing said each information terminal device to detect its own position and then send information indicative of the detected information to said server apparatus; and

permitting said server apparatus to calculate from position information being sent from each of said plurality of information terminal devices an index number indicative of either a degree of congestion or popularity with respect to a plurality of preregistered facilities, execute a route search to determine a route leading to a destination location from a starting place under search conditions at

00079154-061301

5

10.

15

20

25

information terminal devices for receiving information from each information terminal device, characterized by comprising the steps of:

causing said each information terminal device to
5 detect its own position and send information indicative of such detected position to said server apparatus; and

letting said server apparatus generate information indicating a distribution of users from the position information being sent from each of said plurality of
10 information terminal devices.

09879164.061301